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instrument then, owing to the decreasing altitude of the Sun, began to fall again.

As the readings of the thermometer may prove interesting, I subjoin them:—

Readings of the Solar Thermometer during the Eclipse, December 12th, 1871.

Mean Time.	Therm.	Mean Time.	Therm.	Mean Time.	Therm.	Mean Time.	Therm.
h m s	deg.	h m s	deg.	h m s	deg.	h m s	deg.
2 22 25	114·8	3 5 25	107·4	3 46 40	109·5	4 18 10	112·1
2 24 55	114·3	3 8 55	107·0	3 49 55	110·0	4 19 55	111·8
2 32 25	113·6	3 12 25	106·3	3 52 55	110·5	4 22 25	111·1
2 36 25	112·6	3 15 55	106·1	3 55 40	111·0	4 24 55	111·0
2 41 55	111·5	3 19 55	106·0	3 59 55	111·8	4 27 25	110·4
2 44 55	111·1	3 22 55	106·1	4 2 25	112·8	4 29 55	109·7
2 48 55	110·5	3 25 55	106·3	4 5 55	113·5	4 32 25	109·2
2 52 55	109·6	3 29 55	106·6	4 9 25	113·3	4 34 55	109·0
2 55 25	109·0	3 33 55	107·3	4 11 55	113·0	4 50 55	107·0
3 0 25	107·7	3 39 55	108·7	4 13 55	112·9	5 27 25	103·8
3 3 25	107·2	3 43 40	109·0	4 15 55	112·5	6 16 25	93·0

On the Aurora of February 4. By H. P. Finlayson.

As it is probable that some members of the Royal Astronomical Society saw the Aurora Borealis of the evening of Sunday last, Feb. 4th, I am anxious to record its appearance as seen here; for, should the display have been similar to an observer at some considerable distance from Dover, it may be possible thereby to obtain some faint idea at what height such an electric storm takes place. The fore part of the evening was cloudy, and no stars visible; the clouds close to the Earth seemed vapoury, or large foggy clouds, and were reflecting a blood-red colour, as from some great conflagration. One could not tell how this red light was obtained, for above them there appeared to be one large cloud that covered the whole of the sky, thus preventing the stars being seen between the openings of the lower clouds. This led me to think that the cause of this red light must be very close to the Earth, on a level with or just above the lower clouds. This, however, cannot be correct, since the phenomenon was seen in Paris and Constantinople.

Between 10 and 11 the sky was quite clear of clouds, and then the Aurora Borealis was seen in perfection,—rays of light in every direction, and all radiating from one point in the heavens. At one time there were so many streamers, and the radiation so complete, that the point of departure was pretty accurately

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given; it was in the constellation *Gemini*, and between *Jupiter* and the two principal stars.

On intently watching these rays of *white* light, I found they had a slow motion in the same direction as the Earth on its axis: thus showing that the whole must have been revolving very slowly round the radiating point, taking, I should think, five or six hours to complete a revolution. Many of the rays were 60° to 70° long, and running direct from the centre. The light of the stars was very little interfered with when a streamer passed over them: I should say not at all.

Now, should you have any other description of this Aurora Borealis and the radiant point altogether different, it would give us some clue whether all this emanates from the atmosphere or above it.

At the beginning of last month I noticed a very large halo round the Moon, quite 40° to 60° in diameter, a complete circle; and yet the Moon was very little more than a thin crescent. This I thought strange and curious, and, thinking it may prove interesting, have mentioned it here.

Dover, *Feb.* 8, 1872.

Occultation of ζ Tauri, December 8th, 1870.

By J. Maguire, Esq.

In the last Supplementary Number of the *Monthly Notices* there is a communication from the Rev. J. Spear, from Churkrata, in India, in which the following statement occurs:—

"I am sorry I have not been able to record any observations of importance, except perhaps the error in the calculation of the occultation of ζ *Tauri*."

"December 8. Watched for the occultation of ζ *Tauri*. Greenwich mean time of apparent conjunction in right ascension of Moon and star $5^h\ 0^m\ 3^s$. Limiting parallels N 90–N 19. No occurrence. The Moon passed at least 10′ north of the star to the best of my judgment."

The geographical position given is—

Latitude	30° 42′ 4″
Longitude..	$5^h\ 11^m\ 42^s$

I may add that the right ascension at conjunction is $5^h\ 0^m\ 39^s$ in the *Nautical Almanac*, and the latitude, although not marked N., I have assumed to be so.

If, then, the error above mentioned refers to what took place on the 8th December, 1870, it appears that Mr. Spear, finding

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